

REMARKS/ARGUMENTS

Status:

Presently, claims 1-23 remain pending and stand rejected as follows:

1. Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Flickinger.
2. Claims 9-16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger in view of Carles.
3. Claim 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger.
4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger in view of Hall.
5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger in view of Bergman.
6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flickinger in view of Caries as applied to claim 9 above, and further in view of Chen.

Discussion

Presently, claims 1, 9 and 19 are independent claims, and all others are dependent claims. In each of these independent claims (indeed, for all claims), the Flickinger reference is cited as anticipated or rendering obvious (in whole or in part) the claim limitations. As will be seen, Flickinger is deficient with respect to at least one limitation, and therefore it cannot be used by itself, or in combination with the disclosed references, to anticipate or render obvious the independent claims, and hence the claimed invention.

The use of meta-data to describe the content of an asset, is by itself, not new (see, e.g., the prior art references cited). However, the present invention is not limited to this aspect. For example, claim 1 recites that the metadata object “comprises an application identifier identifying an application associated with processing the asset.” As will be explained, this

limitation is not disclosed by the cited references.

The “application identifier” is just that – an identifier (such as a numerical tag, value, or name) that identifies an application for processing the asset (see, e.g., page 3, line 17-19; p. 13, lines 9-13).

A hypothetical example can illustrate one embodiment of the invention. Assume that there are several applications present in the set top box, including an application program for processing advertisements, program guide information, broadcast programs, and pay-per-view movies.

Recall that an asset comprises metadata object and a content object. For example, there may be a pay-per-movie asset comprising metadata about the movie, and the movie itself. Similarly, there can be another asset comprising program guide asset comprising meta data about the program guide, and the program guide data itself. Preferably, each asset is associated with only one application. (Specification, page 13, lines 11-12.)

In each case, the meta-data includes an application identifier. A process that receives the asset can examine the application data in the metadata, and know that the pay-per-view application is the proper application to process the asset. Likewise, if the asset is a program guide asset, the meta-data will indicate that a program guide application should process the asset.

The specification indicates that the entity performing this high level, or ‘up-front’ processing is the AMS. Consequently, the following sentence in the specification should be clear:

Because the application associated with an asset is named in the metadata, the AMS 165 can communicate with, or preferably access, the application which understands the metadata parsed by the AMS 165 and received from the staging server 160.

Thus, it becomes apparent that the AMS only needs to parse the application identifier to send the asset to the proper application for processing, and the AMS does not need to be programmed to recognize all the possible variations of the metadata structures which are unique to each application. Thus, the program guide application will receive and process the program guide asset, and it will know how to parse and process metadata describing the

program guide content. However, the program guide application is not required to know how to process, say, pay-per-view metadata or a pay-per-view content object. Similarly, a pay-per-view application does not have to recognize and process program guide information. The AMS is able to select the proper application based on the application identifier.

This structure does not require separate dedicated communication channels for each sending each type of asset. For example, *if there was a separate communication channel to the set-top-box for sending advertisements only, as well as separate channels for program guides, etc., there would be no need to identify the application appropriate to process the asset.* In this case, the program guide application would only receive program guide assets over the channel. Likewise, the advertisement application would only receive advertisement assets on its channel. In essence, selecting the channel to send the asset would select the application that would be receiving it.

The Flickinger Reference

The Flickinger reference operates using a separate channel to convey advertisement (“ad”) data.

Briefly, it is appropriate to review how Flickinger operates, so as to better understand what it discloses.

Flickinger discloses transmitting a “map” to the set top box (“STB”) which at a high level, indicates to the STB whether and how to process the ad, or ignore the ad. (Par. 53, 74.) Each ad in turn, is “tagged” so as to indicate characteristics of the ad (par. 54). The ad tag is detected by the STB, which uses the map, to determine how to process the ad (par. 56).

Flickinger discloses that that the ads are transmitted to the STB using a separate channel. Specifically, “a separate data stream could be created for each ad program stream.” (Par. 77) “Alternatively, the transport stream PSI/SI information could also be used to characterize the ad channel...” (par. 80). Also, it states that “[e]ssentially, one or more new data services for the ad channel ‘program stream’ is created and in it is sent both

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metadata regarding the ads and splice information (the start and end timeing of each ad.” (Par. 85.)

The key point is that a “separate data stream” or an “ad channel” is disclosed for sending the ads. This indicates that Flickinger teaches that ad information is segregated from other types of information (e.g., program guide information, movies, etc.). Because ad information is sent on its own channel, *there is no need to identify which application is used to process the ad information.* Futher, because Flickinger only focuses on ad data, there is no need to distinguish an advertisement asset from another asset, e.g., a program guide asset, or a pay-per-view asset.

Discussion of Specific Claim Limitations

Each of the independent claims variously recites the aspect of an application identifier that is processed and used to identify the appropriate application for processing the asset.

Claim 1

For example, claim 1 recites “*a metadata object, wherein the metadata object comprises an application identifier identifying an application associated with processing the asset.*” Thus, for Flickinger to anticipate, there must be something within the metadata which corresponds (or is inherent) to an application identifier that identifies an application for processing the asset.

For this proposition, the Office Action cites paragraphs 56 and 74. Paragraph 56 states:

[0056] The ad tag or vector can be detected by the STB 200 to determine whether or not to store the ad and when and how to display the ad. Such determination can be accomplished in a number of ways depending on the application. If the tag is a simple identifier (of the ad or the ad group to which it belongs) and is sent with the ad, the STB 200 could examine the tag at the moment the advertisement is received and either save it or ignore it based upon the instructions/rules preprogrammed into the STBs 200 ad map.

Applicant notes that there is no discussion of the “tag” or “vector” identifying one of several applications for processing the asset. (Applicant interprets the phrase “depending on the application” as referring to the desired use of the system, and not to mean depending on a “program module.” If the Examiner interprets this phrase otherwise, clarification as to the meaning is requested by the Applicant.)

Paragraph 74 states:

[0074] This tag or ad vector can be used by the STB 200 to determine whether or not to store the ad (and also when and how to display the ad). Such determination can be accomplished in a number of ways depending on the application. In the case that the tag is a simple identifier (of the ad or the group to which the ad belongs), and is sent with the ad, the STB 200 would examine the tag of the ad as soon as the ad is received (on-the-fly), and either save it or ignore/discard it based upon instructions/rules (e.g., a group map) possessed by the STB 200 (i.e., previously sent to the STB by e.g., the operator). Such “on-the-fly” processing may require that each ad received be buffered in the memory while the processing and decision of whether or not to store the ad on the STB is made. As soon as the decision is made, the buffer memory is cleared, and the ad is either discarded or stored on the HD (or other memory).

Again, Applicant notes that there is no disclosure of an application identifier. All the text states is that the “STB” examines the tag. There is no disclosure of whether one or several applications are involved. The text merely states that the processing of the ad may take different forms, including storing or discarding it. There is no disclosure of multiple applications, one of which is identified by an application identifier in the metadata. (Again, the phrase “depending on the application” is interpreted by the Application to refer to the desired or potential use, not a “programming module”.)

There are a number of aspects that confirms Flickinger presumes there is a single application processing the advertisement meta-data. First, Flickinger does not disclose other metadata being simultaneously transmitted with advertisement data (e.g., there is no discussion of metadata for program guides, pay-per-view movies, etc.). Second, because a separate channel is used to transfer ads, the metadata for the ads is segregated in advance – hence there is no need to distinguish between advertisement metadata and other types of metadata. Finally, the

“Summary of the Invention” as stated by Flickinger is that “[t]he present invention is directed at a method and apparatus for providing targeted advertisements (ads) to the subscriber terminals, e.g., set-top boxes (STBs). In particular, the invention provide an ad storage and filtering system for selectively identifying targeted ads to be stored in memory of the STB.” (Par. 9). Again, the summary of the invention does not speak at all of discriminating between ad assets and other types of data, or distinguishing between advertisement metadata and other metadata.

Consequently, it appears that Flickinger is only concerned with how to process ads, and not how to identify one of several applications for processing various types of assets.

Claim 9

Claim 9 is the next independent claim, and recites in part:

an application associated with the asset identified by the application identifier to interpret the data relating to the content.

This claim limitation is consistent with the concept that there is an application which is identified by an application identifier. Once the application is identified, that application then interprets the asset.

Again, the motivation for identifying an application is because there are multiple applications in the STP or headend for processing various types of assets. If there were only one application processing all types of assets, there would be no reason to identify which application should be used. Because Flickinger only discloses one type of meta-data, and a segregated channel is used for conveying it, there is no need to identify which application in the STB is to process the meta-data. Essentially, in Flickinger, selecting the channel to send to the advertisement results in selecting the application which will process it.

Claim 19

Claim 19 is the next independent claim, and it recites in part:

“receiving an asset, wherein the asset comprises both a machine readable description identifying content and related data wherein the related data further comprises an application identifier” and “parsing the machine readable description to determine an

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application associated with the asset and identified by the related data.”

This claim limitation is consistent with the concept that there is an application which is identified by an application identifier to process the asset. Again, Flickinger does not disclose an asset comprising related data, “*wherein the related data further comprises an application identifier*”

Relationship to Claim Rejections

Applicant believes that the above demonstrates why each of the independent claims variously recites a concept which is not disclosed in Flickinger. Consequently, the rejection of claim 1 as being anticipated by Flickinger, and claims 9 and 19 being rendered obvious in light of Flickinger and Carles is improper.

In fact, addressing the Office Action for claims 9 and 19, it is observed that a paradox is identified. As noted, claim 1 is alleged in the Office Action as being anticipated by Flickinger. Thus, the rejection of claim 1 is based on Flickinger anticipating the limitation in claim 1, “*a metadata object, wherein the metadata object comprises an application identifier identifying an application associated with processing the asset.*”

However, for rejecting claims 9 and 19, the Office Action states:

Flickinger does not disclose a system with a content server storing the content and in communication with a subscriber set-top box for providing the content to the set-top box; and

an application associated with the asset identified by the application identifier to interpret the data related to the content, wherein the application identifies a server that receives the content from the staging server.

Thus, the Office Action alleges in rejecting claim 1 that Flickinger discloses an application identifier identifying an application, but for claim 19, the Office Action admits that Flickinger does not disclose “an application associated with the asset identified by the application identifier.” Thus, there is a *prima-facie* case that the use of Flickinger is deficient in anticipating claim 1, and that Applicant’s arguments traversing the rejection for claim 1 have merit.

For this limitation in claims 9 and 19, the Office Action states:

In an analogous art, Carles teaches a system with a content server storing the content and in communication with a subscriber set-top box for providing the content to the set-top box

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(figure 3, part 11; column 3, lines 24-28); and
an application associated with the asset identified by the application identifier to
interpret the data related to the content, wherein the application identifies a server that
receives the content from the staging server (column 3, lines 16-28).

Thus, the Carles reference is alleged to disclose the “application identifier” identifying the application. However, the cited text in Carles (col. 3, lines 16-28) states the following:

In addition to providing programming information in its transmission stream, server 10 also provides commercial messages. Server 10 has access to a library of commercial messages 38, which contains all of its commercial messages stored in a convenient format. Each commercial message is a “smart commercial”, in that it contains embedded information identifying the categories of recipients for the message. As is explained more fully below, this embedded information is utilized by a Commercial Message Management Server (CMMS) 11 to produce a set of subscriber addresses corresponding to each category of recipient identified by the embedded information.

Applicant does not find any mention or suggestion of an “application identifier” or an “application associated with the asset identified by the application identifier” in the text. It appears there is an unstated assumption by the Examiner that the “Commercial Message Management Server (CMMS)” correspond to the application in the claims. If so, then Applicant notes that there is no “application identifier” indicated in the cited text that identifies the CMMS application. Is the intention to analogize the “embedded information” to the “application identifier”?

Applicant is unable to more fully respond to the rejection because it is not clear exactly what is alleged to be the “application” and what is the “application identifier.” If the Examiner believes that Carles is appropriate for disclosing this limitation, further clarification is requested to explicitly clarify how Carles discloses the limitation.

Applicant maintains that there is no teaching or suggestion in Carles of an asset comprising 1) content, and 2) data related to the content comprising an application identifier, and where the application identifier identifies the application associated with the asset for interpreting the data related to the content. One reason is that according Fig. 3 in Carles, the server 10 communicates with the CMMS knowing full well that the CMMS is the application handling commercial information so as to produce a set of subscriber addresses corresponding to

each category of recipients identified by the embedded information. (Col. 3, lines 24-26).

Put in other words, there is no disclosure in Carles of the server 10, receiving commercial messages from the library 38, and then ‘asking’ which application is capable of reading this message. The text states that the server “cooperates with CMMS to create a commercial message schedule” (col. 3, lines 30-31.) There is never any question as to how the server knows which application is involved – it is the CMMS. Thus, there is no need for the server to analyze an application identifier to identify which application should be handling the asset. Because Carles appears to only pertain to handling commercial messages, there is no need to define different applications for handling program guide data, pay-per-view movies, advertisements, etc. If there are not different applications, then there would not be any need for an identifier to identify the various applications that could be used.

Applicant submits that the same arguments apply to independent claim 19, which also recites an “application identifier.”

The Independent Claims are Patentable Over Flickinger and Flickinger in view of Carles

Applicant submits that the Flickinger and Carles only pertain to handling one type of asset – a commercial message. Inherently, these references presume that the nature of the asset is known to be a commercial message, and therefore, the type of application appropriate to process the asset is also known – it is the application that handles commercial messages. Thus, there is no need to initially determine what is the appropriate application (e.g., pay-per-view application, program guide application, etc.) to handle the digital asset.

Applicant believes that with this understanding, it becomes apparent that the cited references are deficient to anticipate or render obvious the independent claims. Further, if the independent claims are patentable over the prior art, then the dependent claims, as a matter of law, must also be dependent. Consequently, for the sake of brevity, applicant has not addressed each of the rejections of the dependent claims with respect to the cited prior art in the Office Action.

Accordingly, Applicant has not amended any of the claims herein in order to distinguish the claims from the prior art. Applicant submits this response to the Office Action, which shows

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why the claims are patentable over the cited references, demonstrates why the claims are now in a condition for allowance. Applicant respectfully requests that the rejection be withdrawn and that prosecution on the merits can be closed by issuing a notice of allowance.

CONCLUSION

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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